

Case 2914

***Diplocentrus mexicanus* Peters, 1861 (Arachnida, Scorpiones): proposed confirmation of the rediscovered holotype as the name-bearing type**

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Abstract. The purpose of this application is to reinstate the rediscovered holotype as the name-bearing type of *Diplocentrus mexicanus* Peters, 1861, a species of scorpion from the states of Mexico and Oaxaca in Mexico (family DIPLOCENTRIDAE Pocock, 1893). The original material had been presumed lost and a neotype designated; the holotype and neotype are now found to belong to different subspecies. *D. mexicanus* is the type species by monotypy of *Diplocentrus* Peters, 1861. The genus *Diplocentrus* includes 30 species distributed from southeastern United States throughout Mexico to Belize, Guatemala and Honduras.

1. Peters (1861, p. 512) described *Diplocentrus mexicanus* on the basis of a single female specimen from 'Mexico' (region unstated) deposited in the collection of the Zoologisches Museum, Humboldt-Universität zu Berlin (catalog no. ZMB 74). The species is the type by monotypy of *Diplocentrus* Peters, 1861, which was not described separately from the species. Karsch (1879, pp. 98–99) discussed the species and placed in the genus *Scorpio whitei* Gervais, 1844, which he considered a senior synonym of *mexicanus*. After a careful study Karsch (1880, pp. 407–408) concluded that both were valid taxa, although *whitei* continued to be cited for many years as the valid name for the type species of *Diplocentrus*. Stahnke (1976, p. 58) and Francke (1977, pp. 145–146) provided further evidence that the two species were distinct. *Diplocentrus* is the type genus of the family DIPLOCENTRIDAE Pocock, 1893.

2. In the early 1960s the late Prof H.L. Stahnke of Arizona State University visited a number of European museums and borrowed the types of most of the described North American scorpions, including the type of *Diplocentrus mexicanus* from Berlin. There was, however, no record that a loan of the type had been made. In the early to mid-1970s Oscar Francke began his work on *Diplocentrus* as a graduate student at Arizona State University under M. Cazier, and by 1975 had published a paper on the genus. Francke planned the necessary redescription of *D. mexicanus* as part of a large study on Mexican *Diplocentrus* and requested a loan of the holotype from Dr M. Moritz, the curator in Berlin. Dr Moritz, who had not been employed at the museum in the 1960s, replied that the type could not be found, that there was no evidence that it was on loan, and that it was presumably lost or destroyed in World War II, as were a number of other types. He later published that the type was not in the museum (Moritz & Fischer, 1980, p. 319).

3. Stahnke (1976, pp. 58–59) published photographs and descriptive notes on the holotype of *Diplocentrus mexicanus*. Unaware of this paper (which must have been in

press) and of Stahnke's possession of the holotype, Francke (1977, pp. 152–164, figs. 1, 9, 17, 27–32) redescribed and illustrated *D. mexicanus* and designated a male neotype from 'Mexico' (exact locality unknown) housed in the Zoologisches Institut und Zoologisches Museum der Hamburg Universität, Hamburg. The species was poorly understood and designation of the neotype was justified; the designation satisfied the requirements of Article 75 of the Code. In addition, Francke recognized two subspecies of *mexicanus*: the nominate based on the Hamburg neotype and a female specimen in the Natural History Museum in London, and *D. mexicanus oaxacae* based on a male holotype and found from several localities in central Oaxaca state.

4. In 1986 I examined the presumed holotype of *D. mexicanus* from the Zoologisches Museum in Berlin, bearing catalog no. ZMB 74. The specimen in the vial was clearly not the holotype but a specimen probably inadvertently switched by Stahnke and sent to Berlin in 1984. The holotype was eventually found among the H.L. Stahnke collection in the California Academy of Sciences, San Francisco, by Mr Vincent Lee (personal communication, November 1991). Examination of this specimen has confirmed that it is indeed the holotype, bearing the characters given by Peters (1861) and Karsch (1879, 1880), and depicted in Stahnke's (1976) photographs. It has now been returned to Berlin.

5. The refund holotype of *D. mexicanus* and the neotype of *D. mexicanus mexicanus* designated by Francke (1977) do not belong to the same subspecies. The holotype is conspecific with Francke's *D. mexicanus oaxacae*, whilst his neotype is a separate subspecies, based on the characters used by him to define subspecific taxa. I have discussed this problem with my colleagues Drs David Richman and G.B. Edwards and it is our collective opinion that the holotype should be reinstated as the name-bearing specimen. The name *D. mexicanus oaxacae* will become a junior subjective synonym of *D. mexicanus mexicanus* and the subspecies represented by Francke's neotype will require a new name. Francke and I have written a paper renaming the subspecies; we will wait until the Commission has made a ruling before submitting the manuscript for publication. Francke's (1977) division of *mexicanus* into subspecies has been mentioned only once (briefly, by myself) since its original proposal (Sissom, 1991, pp. 123–124).

6. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to confirm as the name-bearing type for *Diplocentrus mexicanus* Peters, 1861 the rediscovered holotype;
- (2) to place on the Official List of Generic Names in Zoology the name *Diplocentrus* Peters, 1861 (gender: masculine), type species by monotypy *Diplocentrus mexicanus* Peters, 1861;
- (3) to place on the Official List of Specific Names in Zoology the name *mexicanus* Peters, 1861, as published in the binomen *Diplocentrus mexicanus* and as defined by the holotype (female specimen no. ZMB 74 in the Zoologisches Museum, Humboldt-Universität zu Berlin) confirmed in (1) above.

References

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